

Impacts of Human Activities: Derelict Fishing Gear in Puget Sound

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Derelict fishing gear can be nets, lines, crab and shrimp traps or other equipment that is abandoned or lost in the marine environment. Since modern nets and fishing line are made of a monofilament plastic, much of the derelict fishing gear doesn't decompose in the water for decades. There are literally thousands of tons of derelict fishing gear in Puget Sound. Gear has accumulated in bays, inlets, and deep water of the Sound and often continues to indiscriminately capture and kill fish, shellfish, marine birds and mammals. With initial funding through the National Oceanic and Atmospheric Administration's (NOAA) Community-based Restoration Program, the Northwest Straits Commission is tackling this enormous problem.

The impact of derelict fishing gear poses many problems to both marine animals and people, including:

- Entangling divers;
- Killing or wounding fish, shellfish, birds and marine mammals that become entangled;
- Compromising marine ecosystems and species, such as Pacific salmon and rockfish;
- Damaging propellers and rudders of recreational, commercial and military vessels, as well as putting the vessels' crews in danger.



Location & Verification Surveys

Surveys are conducted to locate concentrations of derelict fishing gear, which are entered into a database of known locations. This database now contains over 2,500 entries. Maps created from this data provide a clear visual display of the problem - even with only a small percentage of suspected derelict gear reported to date. Sample maps can be viewed at www.nwstraits.org/projects-derelictgear.html. It is estimated that Puget Sound and Hood Canal contain over 2.6 million pounds of derelict fishing gear.

Removal & Disposal Guidelines

The Northwest Straits Commission and the Washington Department of Fish and Wildlife adopted guidelines in November 2002. These safety and prioritization protocols were developed as a key part of this project.

Documenting Habitat & Wildlife Damage

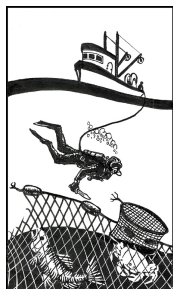
Photos and video footage from gear removal operations show that rocky reef habitat tangled with gear is practically barren of the lush growth expected in such areas. Derelict gear smothers marine habitats and prevents access to the habitat. Dead and decaying marine organisms are consumed by scavengers within a few days or weeks, so the number of dead animals observed at any one time is only a snapshot of the mortality that occurs continuously. Derelict nets also capture and kill salmon en route to spawning streams. Not only are fish and invertebrates at risk, marine mammals and marine birds are also endangered by derelict fishing gear. In one crab pot found in Padilla Bay, 72 crab (mostly red rock crab) were found. The entanglements found are a snapshot of the total mortality caused by this gear – it takes only a week or two for fish and crab to be eaten or decompose after being entangled.



Gear Removal Summary

Natural Resources Consultants has been contracted as the project manager for the ongoing removal of derelict fishing gear, working with commercial vessels and surface-supplied air divers. Removal projects have occurred in many locations, including Dungeness Bay, Birch Bay, south Lopez Island, Lummi Island, Everett Bay and Port Susan Bay. As of early February, 2005, over 87 days were spent on the water removing gear. To date:

- 686 derelict crab, shrimp and octopus pots/traps have been removed
- 260 nets have been removed covering over 72.6 acres of habitat (3.15 million sq. ft.)
- 498 entangled fish, including salmon and rockfish were found in the recovered gear
- Over 1,100 live and dead crab, including Dungeness and red rock crabs
- 4 dead marine mammals were entangled in the recovered gear
- 90 dead marine birds have been found in recovered gear



Public Reporting System

As a result of this project, Washington Department of Fish and Wildlife now hosts a toll-free Reporting Hotline at 1-800-477-6224 and a Derelict Fishing Gear Project Web site at www.wdfw.wa.gov/fish/derelict a reporting form available online. Reports of derelict fishing gear are submitted by sport divers, boaters and fishermen as well beach walkers. These citizen reports help identify derelict fishing gear locations in the marine environment for future removal efforts.

Funding

The Northwest Straits Commission received funding for derelict fishing gear removal from numerous sources, including the Washington State Salmon Recovery Funding Board for derelict net survey and removal work in key salmon migration corridors. The NOAA-Community Based Restoration program funded survey and removal of all gear types and locations. Additional funds have been received from the Tulalip Tribes, the Greystone Foundation and other private foundations for derelict fishing gear removal. Funding has also been received from King County to mitigate the impacts of specific projects.

Derelict Fishing Gear Reduction Plan

The Washington Department of Fish and Wildlife, with participation by the Commission, developed a *Derelict Fishing Gear Reduction Plan* which was submitted to the Washington State legislature. The Plan addresses the problem of derelict fishing gear, the solutions to derelict gear removal learned during this project and evaluates some recommendations for reduction in the future loss of fishing gear.

More Information

The Northwest Straits Commission's web site contains current information about the derelict fishing gear removal project, as well as the state-adopted guidelines for gear removal operations. Project reports on derelict fishing gear removal operations are available upon request. Please go to <http://www.nwstraits.org/projects-derelictgear.html> or contact:

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